

What is claimed is:

1. A temperature measuring device for measuring the temperature of a moving filament, comprising:

a body having an inlet and an outlet for entry and exit of the moving filament; and

5 a baffle preceding the inlet, the baffle including at least one fin and at least one aperture adapted to reduce a fluid film associated with the moving filament.

2. The temperature measuring device of claim 1, further including a bore disposed between the inlet and the outlet of the baffle for receiving the moving filament.

10 3. The temperature measuring device of claim 1, further including a groove disposed in the baffle for inserting and removing the filament from the baffle.

4. The temperature measuring device of claim 1, further including a guide disposed in the baffle for guiding the moving filament.

5. The temperature measuring device of claim 4, wherein the guide is disposed along a bore in the baffle.

15 6. The temperature measuring device of claim 1, wherein the baffle is mounted on the body near the inlet of the body.

7. The temperature measuring device of claim 1, wherein the at least one aperture provides a pathway to an exterior of the baffle.

20 8. The temperature measuring device of claim 1, wherein the at least one aperture is an area disposed between a first fin and a second fin.

9. The temperature measuring device of claim 1, wherein the baffle includes a first portion that is moveable relative to a second portion.

10. The temperature measuring device of claim 9, wherein the second portion of the baffle includes a lid that at least partially encloses the filament in the baffle.

25 11. The temperature measuring device of claim 9, wherein the first and the second portions of the baffle each include at least one fin and at least one aperture.

12. The temperature measuring device of claim 1, wherein the baffle is heated, thereby preheating air that may enter the body of the temperature measuring device.

13. The temperature measuring device of claim 1, wherein the at least one aperture in the baffle does not open to a top of the baffle.

5 14. A baffle for use with a temperature measuring device for measuring the temperature of a moving filament, comprising:

an inlet and an outlet for entry and exit of the moving filament;

a bore disposed between the inlet and the outlet for receiving the moving filament;

10 at least one fin disposed along the bore, wherein the at least one fin is oriented generally perpendicular to the bore; and

at least one aperture disposed along the bore, wherein the at least one aperture is oriented generally perpendicular to the bore.

15 15. The baffle of claim 14, further including a groove disposed along the bore for inserting and removing the filament from the baffle.

16. The baffle of claim 14, further including a guide disposed near the bore for guiding the moving filament.

17. The baffle of claim 14, wherein the baffle is mounted to a temperature measuring device.

20 18. The baffle of claim 14, wherein the at least one aperture provides a pathway to an exterior of the baffle.

19. The baffle of claim 14, wherein the at least one aperture is an area disposed between a first fin and a second fin.

20. The baffle of claim 14, wherein the baffle includes a first portion that is moveable relative to a second portion.

25 21. The baffle of claim 20, wherein the second portion includes a lid that at least partially encloses the filament in the baffle.

22. The baffle of claim 20, wherein the first and the second portions of the baffle each include at least one fin and at least one aperture.

23. The baffle of claim 14, wherein the baffle is heated, thereby preheating air that may enter the body of the temperature measuring device.

5 24. The baffle of claim 14, wherein the at least one aperture in the baffle does not open to a top of the baffle.

25. A method of measuring the temperature of a moving filament, comprising:
moving the filament through a baffle having at least one fin and at least one aperture;
reducing a fluid film associated with the moving filament;

10 moving the filament through a temperature measuring device having a body including an inlet and an outlet for entry and exit of the moving filament; and

measuring the temperature of the moving filament with the temperature measuring device.

15 26. The method of measuring the temperature of a moving filament of claim 25, further including guiding the filament with a filament guide.

27. The method of measuring the temperature of a moving filament of claim 25, further including moving a first portion of the baffle relative to a second portion of the baffle, thereby at least partially enclosing the filament in the baffle.

20 28. The method of measuring the temperature of a moving filament of claim 25, further including inserting the filament into the baffle.

29. The method of measuring the temperature of a moving filament of claim 25, further including heating the baffle.

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